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GENDER AND VIOLENCE:
A STUDY OF INPATIENTS AT A FORENSIC PSYCHIATRIC HOSPITAL

A Project
Presented to the
Faculty of
California State University,
San Bernardino

In Partial Fulfillment
of the Requirements for the Degree
Master of Social Work

by
Leslie Sean Carey
Kathie Sylvies
December 2000

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Approved by:


Rosemary McCaslin, Chair,
Research Sequence

11/16/00
Date


Matt Riggs, Advisor

ASSIGNED RESPONSIBILITIES

This was a cooperative effort in which both authors collaborated throughout the entire project. However, for each phase of the project each author assumed separate responsibilities. These were assigned as follows:

1. Abstract Kathie Sylvies
2. Acknowledgments Leslie Sean Carey
3. Introduction Kathie Sylvies
4. Literature Review Leslie Sean Carey
5. Data Collection Kathie Sylvies
6. Database Construction Leslie Sean Carey
7. Data Analysis Leslie Sean Carey
8. Research Design/Methodology Kathie Sylvies
9. Results Leslie Sean Carey
10. Conclusion Kathie Sylvies

ABSTRACT

Our society has generally viewed women as less aggressive and less likely to commit acts of violence in comparison to men. Statistics show that only 13 percent of the violent crimes in the United States have been committed by women (Steffensmeier and Allan, 1996). However, employees at psychiatric hospitals often report problems of increased violent behavior among their female inpatients. This perception of the female inpatient population is further complicated by the mixed research findings regarding gender and violence. Considering the possible other environmental causations, gender alone should not prove an accurate variable in addressing violent behavior. Variables such as age, location, time, ethnicity, institutionalization and violence to self as opposed to violence to others will likely show significant relevance. This study will attempt to demonstrate how these other biopsychosocial variables play a role in violence prediction for this homogeneous group of forensically committed patients other than gender.

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INTRODUCTION

Problem Statement

Research has demonstrated that a steady increase in violent behaviors among psychiatric inpatients has occurred over the last three decades (Flannery & Hanson, 1994). State-run hospitals tend to report more violence than all other inpatient psychiatric hospitals, primarily due to their forensic capacity (Reid, Bollinger & Edwards, 1985). These increases in violent behavior alone should account for the need to address violence in state facilities. However, changes in American law have mandated that violence prediction, which essentially only labeled the individual patient, be revised (Monahan, 1996).

The need for research into violence prediction has been established at the federal level by the United States Department of Labor's Occupational Safety and Health Administration (OSHA) division that has issued the Workplace Violence Initiative (OSHA, 1996). Violence in psychiatric hospitals involves staff members who frequently become the target for the majority of the assaults (Rasmussen & Levander, 1996). Nurses and their supporting unions have also requested advancements in the

violence prediction capabilities of state hospitals. Flannery and Hanson (1994) state, mental health administrators, in a time of managed care and cost containment, should be concerned about the effects of violence on employees, not only for the costs related to absenteeism, but also for the effects violence has on the mental health care delivery system in general. No longer does the concern for safety remain the sole responsibility of the clinical staff.

The ability to identify the potential for violent behavior is beneficial to the patient as well as the facility, staff, community and social work as a profession. Violence prediction will aid in addressing the specific situations and interactions with other patients that led to the aggressions (Bjorkly, 1994). With the attention to each individual patient noting specific triggers and their dysfunctional interaction with staff and other patients, it is possible to alleviate the apprehensions of working with this unique population.

It is equally important to acknowledge that the multitude of variables that contribute to violent behavior may never be fully defined. These numerous variables exist across the biological, psychological and

sociological components of the individual and differ greatly case-by-case. To believe that any instrument will neatly assessed every patient is unrealistically hopeful. However, to dismiss the potential of an instrument which has the potential of lending credible insight to a larger population of patients only because it cannot predict every case is just as ethically unsound.

Many employees of psychiatric hospitals report that one such variable in predicting patient violence is gender (Noble & Rodger, 1989). However, much of the recent literature continues to produce contradicting results regarding gender as a predicting variable. The idea that gender is the primary predictor of patient violence could lead to inattentiveness to other possible contributing factors. For example, labeling of a patient may be considered compromising the therapeutic nature in terms of the treatment provided to the individual, which results in a self-fulfilling prophecy of violence.

Problem Focus

All possible variables relating to the biopsychosocial aspects of an individual should be evaluated for thorough assessment of violent potential. Alternatively, there is no one variable that indicates

prevalence toward violent behavior. Rather, it should be understood that the multitude of interrelated variables only suggests a susceptibility to aggression. However, it is possible that some variables, dependent on each other, do demonstrate the proclivity for violence, and gender may or may not be proven to be just such a variable. These variables are by no means all-encompassing, but may lead to valuable diagnostic tools that should not be disregarded. Therefore, to assess and possibly predict the violent behaviors among female inpatients in state psychiatric hospitals, it is necessary to approach the research from a post-positivist approach, which allows for the impracticality of accounting for all potential variables.

The ability to determine the propensity for violence offers two contributions for the social work practice. First, the ability to identify potentially violent characteristics permits the construction of specialized treatment modalities specifically coupled to that patient. A social worker, with knowledge of those treatment modalities, is then able to implement an expedient and relevant intervention to effectively utilize the time during the patient's hospitalization. Second,

understanding the socialization factors underlying the violent characteristics affords the social worker additional information necessary to identify the cognitive level at which the patient is operating. Therefore, identifying and uncovering predictive individual and/or situational factors that lead to the increasing rates of violent acts by female psychiatric inpatients the need to apply stereotypical or judgmental conclusions alleviated. In doing so, mental health care professionals can determine the different patterns or symptoms that will be identifiable prior to the actual violent behavior and subsequently reduce or alleviate these incidents.

Literature Review

Research pertaining to violence by inpatients of psychiatric hospitals has been recorded since the 19th century. Gray, in 1857, was interested in studying patients who had committed seriously violent acts such as homicide or attempted homicide while under his care and then published his findings of 49 cases that fit these criteria. A substantial amount of research has been accumulated since Gray's research, predominantly from the 1970's to the present. Understanding and predicting violent behavior among psychiatric patients has received

considerable interest over the last several decades and has been a focal point for much controversy in the research into prediction of violent behavior in general. However, it is apparent that the essential factors associated with predicting and controlling violent behavior among psychiatric inpatients has yet to be determined due to the increasing incidents of violence. Monahan (1988) concluded that the most striking characteristic of risk-assessment research is the fact that it is inconsistent. The inconsistencies range anywhere from individual factors such as patients previous psychiatric history, present diagnosis, age and gender to situational factors such as location of incident, time of day and the activity of the patient when the violent behavior took place. Walker and Siefert (1994) found that staff members were most frequently attacked around the time administration of medications.

Today, society appears to have become more violent (Blair, 1991). However, violence in psychiatric hospitals in the United States appears to have far exceeded societal numbers and continues to increase at an alarming rate (Haller & Deluty, 1988; Lindqvist & Allebeck, 1990). This is not to say that the incidents of violence in

psychiatric hospitals achieve the brutality seen in society, largely due to the relative absence of devices capable of doing great bodily injury.

The majority of research regarding gender and violence conducted and published in last few decades has overlooked the use of comparison groups, and focuses on primarily minimal injuries. For example, Pearson, M., Wilmot, F., and Padi, M. (1986) analyzed a twelve month study at a psychiatric hospital that consisted of 283 incident reports stemming from the violent acts of patients. They found that out of the 283 incidents reported, 98.6% either had no visible injuries or minor cuts and bruises. Therefore, having only limited research available to the public that offers possible solutions to the rise in institutional violence the social work and medical professionals must continue in their search for answers to this phenomenon.

The vast majority of those who fall victim to the patient violence are the staff members of the psychiatric hospital. Whittington (1994) observed the findings of several studies and discovered that an average rate of assault on staff members at each psychiatric hospital was one every six days. The research conducted by Walker and

Siefert (1994) found that staff members were most frequently attacked during the administration of medications. Psychiatric staff members reported a higher injury rate than construction workers, who are perceived by the general public as having one of the most dangerous jobs (Lusk, 1992). Additional studies have found that as many as 90% of violent incidents are directed against nurses (Edwards et al., 1988; Noble & Rodger, 1989).

Nurses as a group, have by far the highest rate of assaults against them, possibly due to the fact that they spend the largest amount of time in direct contact with the patients, are required to administer medications that many patients do not wish to take, and are not afforded the time to form personal relationships with the patients.

Most of the information and facts detailing the actual violent behavior of patients is accumulated as a result of incident report forms filled out by staff members on duty at the time of the incident. These are standardized forms that all employees are required to fill out if they have been assaulted by a patient. These forms record the staff member's information, including any injury sustained from the incident and any time missed from work as a result, patient information and situational

information such as the location and time of the incident, and description and severity of the incident. Reliability of incident report forms has been found to be of concern, as Lion et al. (1981) suggests that there is a significant under-recording of violence on incident forms in state mental hospitals. In spite of the concerns this type of research has generated in the professional psychiatric community, progress in violence prediction of psychiatric patients has made considerable progress.

It is understandable why employees of psychiatric hospitals have formulated and maintained many differing unscientific based opinions substantiated on perceptions alone, considering the vast difference in findings that exist in the research community. One of the most common perceptions is that females in psychiatric hospitals are more prone to violence than males. However, research has provided inconsistent findings pertaining to gender. Some studies (Fottrell, 1980; Larkin, Murtagh, & Jones, 1988) indicate that there is a higher rate of assaultiveness among female patients than male, while other research such as Bornstein's (1985), found that hospitalized males tend to be more aggressive than the hospitalized females. Other studies show no major difference with regards to

gender in inpatient violence (Craig, 1982; Kay, Woldenfield, & Murrill, 1988; Tardiff & Sweillam, 1982). However, most research findings do not show a significant difference in the percentage of inpatient violence and gender (Kay et al., 1988; Noble & Rodger, 1989; Yesavage, 1984). These mixed results are more likely a result of the female inpatient violence being observed secondarily rather than being the primary problem focus of the research.

Previous psychiatric history and a history of violent behavior also come up as a matter of disagreement in predicting violent behavior among psychiatric inpatients. Palmstierna & Wistedt, (1989) believe that having a history of violent or assaultive behavior has been repeatedly associated with subsequent violent behavior. In addition, Blomhoff et al. (1990) found that 80% of patients who were violent following their admission could be identified by their prior history of violent behavior. While the opposite was found by Dietz and Rada (1982), where they concluded that there was no relationship between prior violent crime and violent behavior in a maximum security hospital

The patients' diagnosis is thought to hold the greatest possibility for violence prediction by those looking for identifiable variables. In many circumstances, the diagnosis does demonstrate a greater likelihood for violence. Patients who have been diagnosed as schizophrenic are a large population of patients who committed violent acts, particularly those patients who are also acutely psychotic (Noble & Rodger, 1989; Sheridan et al., 1990). Others have concluded that assaultiveness and violence are directly associated with the diagnosis of schizophrenia, especially if these violent patients are also acutely psychotic (McNiel, et al., 1992). Binder & McNiel (1988) found that mania is less common than schizophrenia, but acutely disturbed manic patients may be just as aggressive. Diagnoses of organic brain damage and mental impairment were also associated with violent behaviors (Hillbrand, Foster & Hirt, 1988). McNiel (1994) found that hallucinations and delusions were both causative factors as well in violent behavior. Of those arrested for involvement in violent activities and subsequently placed in an inpatient psychiatric hospital, 90% had been diagnosed with substance abuse or personality disorder or both and 74% had been diagnosed schizophrenic

or schizoaffective disorder (Volavka et al., 1995).

However, some researchers found that the diagnosis did not play any significant role in predicting violence (James, et al., 1990). None of these studies looked at gender and the possibility that female inpatient's diagnoses could be a significant factor contributing to the high percentage of violence.

Diagnosis is not the only factor in violence prediction. Age of patient and location of incident appears to be a common factor amongst researchers.

Studies show a tendency for younger patients to be more violent (Conyit et al., 1988; Pearson et al., 1986).

James et al. (1990), found that patients 25 years of age and younger were more likely to commit violent acts than those who were older and the younger patients were also inclined to commit more than one act of violence.

Location also seems to be a factor in violence prediction in psychiatric hospitals; violent behavior most frequently occurs in the ward (Harris & Varney, 1986). Rasmussen and Levander (1996) also conducted an inpatient study that found 62% of the violent cases were identified as directly related to a preceding event experienced by the patient

and 86% of those incidents took place in the wards, which include the dining room.

There is some evidence that violent patients are more likely to come from lower socio-economic groups (Edwards et al., 1988). Sexual behavior, too, is reported as accounting for as much as 3% of the aggressive incidences (Crownier et al., 1995). Researchers have agreed on the fact that the majority of violent acts committed by inpatients of psychiatric hospitals are indeed repetitive among a small proportion of the total population. Therefore, the statement holds true that overall, psychiatric inpatients are not violent in general. Barber et al. (1988) found that in a US State hospital 15 long stay patients (average stay 4.5 years) accounted for almost half the total violence. Noble and Rodger (1989) discovered in their study that 91% of the 1,529 admissions were not reported as being violent in any way. Eichelman (1992) agrees with the above information and encourages researchers to strive for a better understanding of the different types of violence and to focus future research on patients who are severely and/or repetitively aggressive.

One of the more recent trends has been to observe the situation or setting during and prior to the violent engagement. Rasmussen and Levander (1996) stated that, "Inpatient violence is best conceived as an interactive phenomenon with contributions from both individual and situational factors." One of the factors regarding setting was time of day as noted by Dietz and Rada (1982), Harris and Varney (1986), and Pearson, Wilmot, and Padi (1986). Walker and Siefert (1994) found that around medication distribution time, attacks on staff were most frequent. On the contrary, Larkin, Murtagh and Jones (1988) found the time of day to be insignificant as a predictor to violence and further noted that aggressive incidents tended to be distributed evenly throughout the day. This particular study also found that the majority of incidents occurred upon Mondays and Fridays, and the least amount of violent incidents transpired on Saturdays and Sundays. Other possibilities regarding setting could be the number of people in close vicinity, month of the year and ratio of patients to staff.

Current research focusing on the screening and predicting factors associated with female inpatients in psychiatric hospitals is almost non-existent. The

research that does exist is conflicting and therefore inconclusive. It is not surprising, therefore, that employees in psychiatric hospital settings hold firm to their belief that females are more aggressive than the males. It is unclear, however, whether or not women patients who violate traditional gender norms are creating a tendency for staff to perceive women patients in gender as more violent than men, when actually they may be merely more violent than the roles that women are supposed to play. Without adequate research regarding females in specific or gender in relation to identifiable violence predicting variables, employees will be forced to maintain their unsubstantiated perceptions and possibly reinforce them. This study will test the relationship between gender and violence in a State Psychiatric Hospital, and therefore will provide empirical evidence that will confirm or refute this belief held by staff. In addition, psychological and sociological variables will be examined for their direct effects on violence, as well as the way in which these variables mediate the effects of gender on violence.

Sociological components may play a larger part in the prediction of violence than alluded to in prior research.

Females may be channeled into different institutional levels in the mental health and criminal justice systems, whereby only the most violent women enter into the State Psychiatric Hospital population. It is true that men and women have identical criteria for the determination of mental illness. However, previous studies found that when women engage in violent, aggressive behaviors, they are more often thought to be mentally ill in comparison to the male population that commits similar violent crimes (Broverman et al, 1972; Nowacki & Poe, 1973). This implies that women are out of their socially based sex role stereotype in what is considered normal behavior and consequently are found to be mentally ill. Furthermore, the violent acts committed by women are more often thought to be directly related to mental illness in comparison to males in general (Faulstich, 1984; McGlynn et al, 1976). This implies that society views violent crimes committed by women to be symptoms of mental illness. Kleinke and Baldwin (1993) found that females are more often committed to mental hospitals as opposed to prisons for violent acts in comparison to men who have committed similar violent crimes. As such, by the time women reach state hospitals they have exhausted the community-based programs, public

health facilities and private organizations. Potentially, only the most violent and aggressive mentally ill females find their way to State Psychiatric Hospitals. The implication is that the patterns of violence of women in psychiatric facilities are what have led them to their placement in those facilities, and that men with similar patterns of violence may have been placed in other institutional settings within the mental health system, or, more likely, the criminal justice system.

The combination of several biopsychosocial events will likely demonstrate a greater significance in the prediction of violence as opposed to any singular variable. Therefore, the authors' hypothesize that gender will not play a significant role in the prediction of violence.

RESEARCH DESIGN AND METHODS

Purpose

Unlike prior research, the approach taken in this study will be to address the issues of violence within a forensic psychiatric hospital over an extended period within a homogeneous group to specifically focus on the concerns of gender as a predicting variable. Most of the prior research has been secondary studies with narrow samplings ($N = < 100$). Brief studies may have captured unique time dependent events and narrow studies may observe too limited a number of females due to their diminutive population as a percentage of the total.

The authors acknowledge that not all variables pertaining to violence prediction will be accounted for in this study. The researchers do not hope to discover direct cause and effect relationships but instead attempt to demonstrate significant factors among the accepted influencing variables of violent behavior in relation to gender.

The dependent variable is violent incidents by patients. The independent variables available from the constructed database that have generally been alleged as likely variables in other studies are gender, type of

incident, age at the time of incident, length of hospitalization at the time of incident, location and time of day. In addition, the authors observed ethnicity to address the possibility of errors in cultural awareness.

Sample

Research was conducted at the Patton State Hospital in Patton, California; a psychiatric facility founded in 1892 with a long-standing dedication to research and care of its patients. The first psychiatric patients seen at Patton in 1893 were, primarily, those brought in by family members and friends. Throughout the years, Patton's patient population has varied not only in size but also in diagnosis and purpose of stay.

Today, the majority of patients at Patton are legally committed under one of two primary criteria. One of the primary patient commitments is Penal Code (PC) 1026; patients that have been declared guilty, but not guilty by reason of insanity. These patients are considered long-term and are often hospitalized for time equal to the mandated time of incarceration normally sentenced for their committed offence. The other primary commitments are the PC 1370 patients who have been deemed incompetent to stand trial for their accused crimes. The goal for

Patton with these patients is to increase their level of functioning to a point that will allow them to operate competently in a court of law. These patients can have their trial date postponed numerous times due to their inability to maintain self-control, understand the procedures of the court, interact effectively with their public defender and/or are unable to comprehend their alleged crime.

Once this population is made competent to stand trial, PC 1372, they are sent back to their county of origin and held in county jail until their court date. Generally, at court three outcomes exist. The patient may be found not guilty or given time served for their guilty plea and are sent home, hopefully to continue treatment. Often these patients are remanded to a state correctional facility following a guilty verdict to serve their sentence. However, some of the PC 1370 patients do make their way back to Patton or one of the other state psychiatric hospitals as a PC 1026 patient after they become competent to stand trial as a PC 1372 patient.

For this study, we will code the data query to extract only the PC 1370 patients. The patients admitted under PC 1026 as well as most of the other penal codes may

have been in the system for years prior to their arrival at Patton. For the most part, these patients have had their treatment plan in effect for a many years and have adapted to their mental health management, which potential may have greatly reduced their propensity toward violence.

Prior to their arrival at Patton, many of the commitments other than the PC 1370 patients either came from prison or have been transferred from other State Hospitals. This length of time within the forensic community has been known to create a stabilizing effect on these patients.

The admission under PC 1370 offers the purest population with a considerable degree of homogeneity that is necessary for a study of this nature. Prior studies have combined entire populations consisting of all penal codes represented in state facilities or entire hospital statistics rather than specific wards in the private community, which has potentially produced skewed findings in the research.

Sampling for this research took the entirety of the database and no random samplings were required. With the use of the latest technology and the assistance from trained computer programmers, the entire database was

combined to give a more expansive picture of the violence being perpetrated in this unique population. This sample is limited in that the patients at this facility come only from California and do not give an adequate cross section of all forensically committed persons. It is quite possible that this dataset will not vary significantly with those from State Hospitals across the country.

Data Collection and Instruments

All patients committed at Patton fall under the guidelines of the California Department of Mental Health. Like all other states, California Department of Mental Health is obligated to follow the rules and regulations for the care and treatment of involuntarily committed mentally ill persons as stipulated in the federal laws in the Code of Federal Regulations, Title 18, Chapter 313 (Cornell University, 1999). Regulations at both the state and the federal level require that violent acts be reported and tracked to aid in the safety of both the patients and the employees entrusted with their care. All incidents of violence at Patton are logged, charted and identified on Special Incident Reports.

Patton, like most other state psychiatric facilities, is attempting to keep these mandated reports on a

computerized database. The database at Patton exists largely do to the efforts of Dr. Raymond Navacco who has already utilized the database in several of his studies. At the time of this research (2000), the database has been in operation for nine years.

By utilizing this database, a relatively complete listing of all violent interactions was accessible. This immense database is an accurate representation of gender within the entire population at Patton and has the potential for comparison at other psychiatric facilities.

The information provided by the Medical Records and Information Management Systems staff at Patton was unable to meet our request for all of the variables and were forced to provide three separate datasets. These dataset were for patient information, diagnosis and incident. These datasets, fortunately, contained at least one common variable in which a relationship could be made. The Microsoft™ software program Access™ was used to form this relationship. Access™ was then used to create a single database, which was then entered in to SPSS™ for statistical evaluation.

Procedures

With appropriate approval, the requested variables and corresponding data from the database on the grounds of Patton was extracted in the three separate datasets by a the third party. In addition to being a requirement of Patton, this means of information gathering ensured absolute protection of confidential material.

The first procedure was to take the datasets which were saved in Microsoft™ Excel™ and enter them into Access™ as individual tables. Both the diagnosis table and the incident table had no identifiable variable in which to form a relationship. The patient identification table had been given a random number, which corresponded to a second random number in the diagnosis table. It was understood that this number was formed from the patient identification number given to an individual patient at admittance. The second random number in the patient identification table was created using an incident case number, which was correlated to a second randomized case number in the incident table.

Once these relationships were established the first query was created that addressed the diagnosis table. This query selected only the Axis I diagnosis that were

primary not secondary. The relationship for this query was then added to the relationships for the tables.

The second query was then able to pull the table of patient identification, the table of incidents and the query for diagnosis into one dataset. This complete query dataset then pulled only PC 1370 patients. When this query was run, there were 3379 cases (N=3379), which was a reduction from a total of 7887 individual incidents.

This combined dataset extracted from the database was then exported to Excel™ as a spreadsheet. This spreadsheet was then loaded into SPSS™ for statistical analysis.

A possible problem in this dataset is that the Special Incident Reports database and, therefore, subsequent dataset was subject to error based on interpretations made by the data processor when inputting from a written report. Another could be that not all of the written reports made it to the data input process. It is also suggested that not all of the incidents were even reported. Lion, Snyder and Merrill (1981) found a substantial under-reporting of violent incidents in a state hospital where only twenty percent of the incidents that were identified from daily ward reports were actually

being recorded in the violent incident database. It is very possible that these findings could be repeated at another psychiatric hospital.

Additionally, incident reports may be incomplete or did not address all variables required. It is not uncommon for a Special Incident Report to have been completed on paper only to find that it does not fit neatly into the parameters established in the database. For this reason, cases with null variables were excluded from the dataset.

Protection of Human Subjects

In compliance with the NASW code of ethics, which states "social workers who report evaluation and research results should protect participant's confidentiality by omitting identifying information unless proper consent has been obtained authorizing disclosure," protection of human subject has been a primary concern in this research (National Association of Social Workers, 1998). In addition, for this study, permission was obtained from the Committee for Research and The Protection of Human Subjects at Patton, the Committee and the Protection of Human Subjects the approving authorities of Patton, the Office of Long Term Care Services for the Department of

Mental Health in Sacramento, California and California State University's Institutional Review Board for use of human participants in research, prior to the extrapolation of data. Adherence to the recommendations and restrictions of these boards has been unwavering.

Any and all patient, staff or visitor identifying variables such as name, date of birth, social security number, hospital identification numbers, etcetera, will be eliminated in the extraction of data by a third party unassociated with this project prior to statistical operation by the authors. Due to this procedure, the project qualified for exempt status when reviewed by the Institutional Review Board at California State University, San Bernardino and the Long Term Care Services for the Department of Mental Health in Sacramento, California.

RESULTS

Once the datasets were combined and entered into SPSS it was observed that there were 3379 cases in the dataset (N = 3379). Of these 3379 cases, 1251 or 37% were females and 2128 or 63% were male. This was remarkable in that the average percentage of the PC 1370 population outside the dataset during this time was 93% male and 7% female.

It appeared that the percentage of females involved in reportable offenses was greater than the percentage of males involved in reportable offenses when the total population of the PC 1370 patients is considered. A chi-square was administered to determine a goodness of fit.

The test determined the following noteworthy significance:

<u>Chi-square value</u>	<u>D.F.</u>	<u>Significance</u>
138.25	1	P < .001

Therefore, females did appear to have been involved in more offenses that were reported. This did not necessarily prove that females were more violent, only that they were reported more often than men on incident reports.

To help determine the significance of this finding, the variable for type of incident within the dataset was combined to indicate one of three categories; acts on

other, act to self and act on staff. Of the 2128 reportable acts that men were involved in, 667 cases or 31.3% of the total male incidents were perpetrated on others, 827 cases or 38.9% involved acts against themselves and 634 cases or 29.8% were committed against staff members. Of the 1251 reported cases that women were involved in, 296 cases or 23.6% of the total female incidences were perpetrated on others, 691 cases or 55.4% involved acts against themselves and 264 cases or 21% were committed against staff members.

It appears that while there may be more incidents reported that involve women, these reported incidents appeared to be more often against themselves rather than against peers or staff. In testing this hypothesis, a second chi-square revealed the following

<u>Chi-square value</u>	<u>D.F.</u>	<u>Significance</u>
85.72	2	P< .001

This variable, type of incident, indicates that the percentage of females demonstrated on the incident reports alone is not sufficient enough to state they have a greater propensity for violence in the forensic inpatient environment. Other variable must be taken into consideration. Here it could be suggested that women are

harming themselves in these incidents, which is symptomatic of the mental illness and not an act of aggression. However, further testing on this variable would be critical.

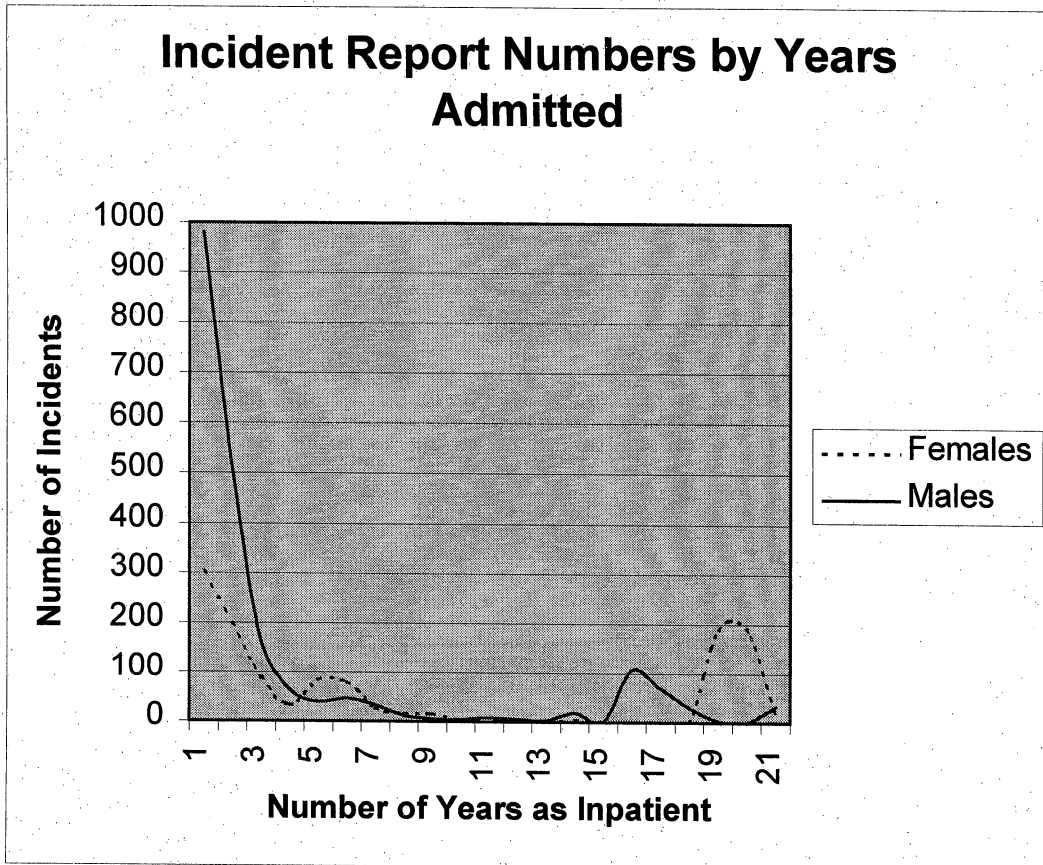
One widely accepted predicting variable for violence is age. It has been stated that the propensity for violence is positively correlated to the age, whereas the younger the patient the higher the likelihood of a realized act of violence. A simple central tendency assessment should again reveal that women are disproportionately younger than the men on these reports. Should women prove younger overall, this could expound as to why women are so grossly over represented on incident reports. However, an examination reveals that the mean age for men is 37, while the mean age for women is 40. This variable appears to support the argument that women have a greater potential to commit violent acts.

It is possible that while these women were older it could be that they have become socialized to the violence being perpetuated against them in an aggressive environment like that found in a forensic inpatient hospital.

Socialization is a process that not necessary takes place initially but would develop over a period time. This would be demonstrated by fewer reported incidents involving women who were recently admitted. The data would then show a gradual increase in the number of reported incidences in relation to years admitted. The greatest number of reported incidents of violence would then be seen committed by women who have been an inpatient for the longest amount of time. Data like this would indicate just such a traumatic institutionalization. Men on the other hand, should demonstrate a propensity for violence early in their admittance, which is indicative of those with the Axis IV diagnosis common to this population; crime, incarceration, legal difficulties and litigation. There should then be a gradual decline in the number of incidents reported in relation to the time spent in groups and individual psychotherapy. Again, the female inpatient cases do not demonstrate the reduced likelihood in this variable either. As demonstrated in Figure 1, the dashed series indicates the number of incidents for the length of times since admittance for females. The solid series indicates the number of incidents for the length of time since admittance for males. These plotted lines

appear to indicate nearly identical patterns for males and females. Male violent incidents are higher early, but women do not appear to increase as predicted.

Figure 1. Incident Report Numbers by Years Admitted

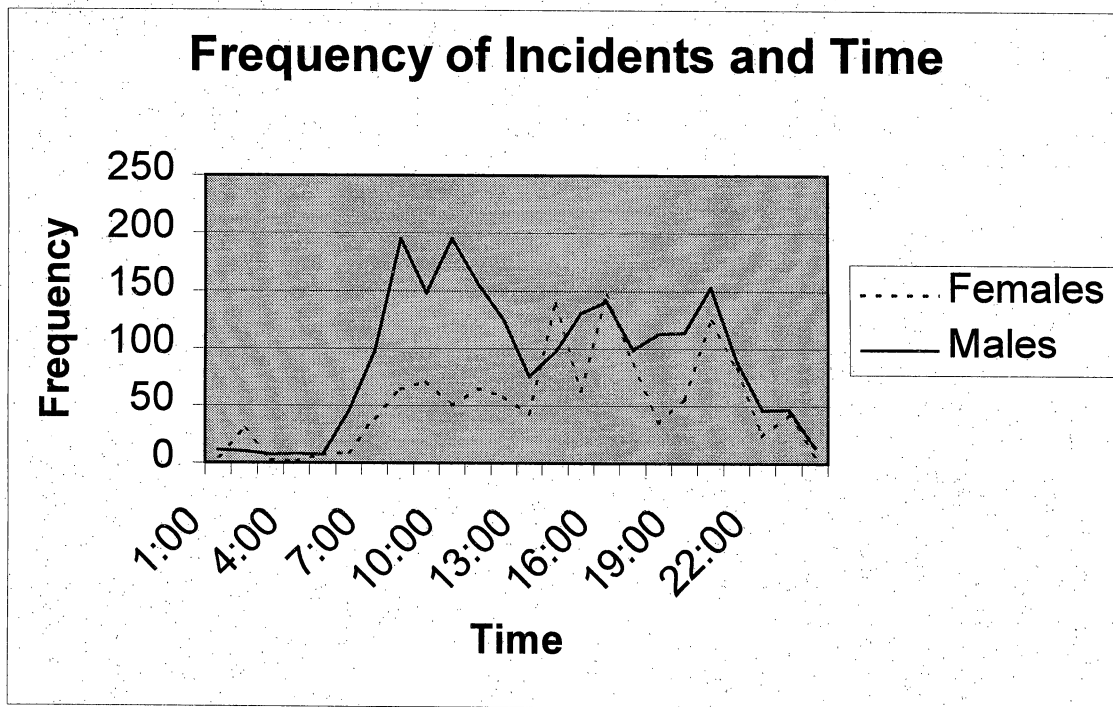


A similar finding occurs in the examination of location of the reported incidents in respect to gender. The three top modes of location for males from greatest to least were hallways (19.8% of reported incidents), the day hall (17.5% of reported incidents) and home unit areas (13.2% of the reported incidents). The three top modes of

location for females from greatest to least were home unit areas (19.6% of the reported incidents), hallways (17.1% of reported incidents) and the day hall (12.5% of reported incidents). These results demonstrate that both males and females appear to commit these violent acts in social settings as opposed to committing these acts alone.

Comparing time and gender reveals two interesting factors when viewed graphically (Figure 2). The three peaks occurring at the 1000, 1400 and 2000 hours correlate

Figure 2. Frequency of Incidences and Time



to the medication times and it appears that females and males have somewhat dissimilar traits in regards to time.

It appears that during morning medication, males tend to have more difficulty than females whereas females have more difficulty in the afternoon medication line.

Possible implications are that women are responding to stressors on the unit as opposed to the decrease medication levels experienced prior to first medication.

In examining the variables of ethnicity and gender, it appears that the male patients have an expectable

Figure 3. Ethnicity and Frequency and Percent of Violence

	FEMALES		MALES	
	FREQUENCY	PERCENT	FREQUENCY	PERCENT
AMERICAN INDIAN	2	0.2	6	0.3
BLACK	212	16.9	738	34.7
CHINESE	9	0.7	2	0.1
FILIPINO	7	0.6	15	0.7
HISPANIC	88	7	710	33.4
KOREAN	1	0.1	0	0
SAMOAN	18	1.4	6	0.3
CAMBODIAN/LAOTIAN/ VIETNAMESE (SOUTHEAST ASIAN)	118	9.4	31	1.3
WHITE	796	63.7	605	28.5
OTHER NON-WHITE	0	0	15	0.7
TOTAL	1251	100	2128	100

number of incidents for each category based on the total population (figure 3). However, the white female patients appear to be exceedingly disproportionately represented, accounting for 63.7% of the total female population.

Making the assumption that both male and female

inpatients represent the community equally, the data possibly demonstrates that minority female offenders are being placed in the prison community while majority female offenders are being view as mentally ill. This would further support a process were those furthest from the social norms are viewed as psychotic as apposed to those who are truly diagnosable under Axis I of the DSM-IV.

DISCUSSION

The authors acknowledge two possible impediments in the accuracy of the original datasets used in this study. First, the three datasets that contributed to the completed database were created ex post facto from a paper tracking system. These datasets required extensive manual input, which historically has led to human error.

Second, the completion of the Special Incident Reports has been the responsibility of the staff members involved or the staff who first-hand witnessed the incident. Often the additional man-hours that such incidents create affect the completion of such reports.

In either case, it is fair to assume that with a database of this size, errors such as these will most likely not affect the outcomes to any critical degree. Further studies may want to calculate the degree of error in this type of reporting.

Although the authors' hypothesis that gender will not play a significant role in the prediction of violence appears to be unsubstantiated, future studies in gender and violence appear to be warranted. This research was able to demonstrate that women are disproportionately represented in the Special Incident Reports. However, it

is unlikely that women are simply more violent than men in forensic mental institutions.

One area to be further examined, as offered in this study, could be related to the phenomena that women have proven to be significantly more likely than men to commit self-inflicted injuries or mutilating acts, while men have a higher percentage of violent acts towards others.

Another would be that men are several times more likely to commit these acts with the use of weapons. The use of a weapon often requires the filing of a special incident report. By women not using weapons the acts maybe viewed as mutual confrontation and be dismissed.

Again, it could be that the societal consensus of women being less violent by nature/nurture than men suggests that they are also less likely to commit violent criminal acts toward others. Therefore, further studies may want to identify the opinions of staff in regards to the reporting of female violence.

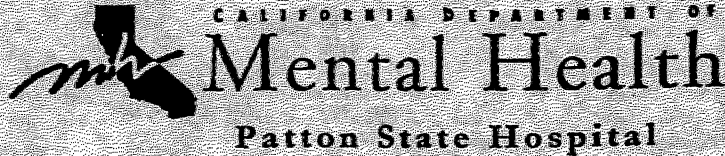
The aforementioned type of ideology could easily be expressed in the judicial system. It is here that judicial officials might assume that the violent actions of women are related to mental illness rather than that of a criminality. Such opinions would more frequently lead

to requests of psychiatric evaluations and, thus, more frequent admittances as PC 1370, incompetent to stand trial. Whereas men would more often be sent to prison for the same offenses having not had the psychiatric assessment.

In summary, this study may not have proved beyond uncertainty the authors' hypothesis that gender is not an adequate predictor of violence, two important discoveries were made. First, gender and violence is worthy of research unto itself, rather than a secondary finding in the study of violence in a non-homogeneous group. And, second, the dynamics of violence prediction within a forensic psychiatric hospital may yield considerable insight into how we as a society view gender. It is hoped that future research will be able to unravel the combination of biopsychosocial predictors responsible for this phenomena of gender and violence rather than allowing indiscriminate empiricism to define observed behaviors.

APPENDIX A

APPROVAL SIGNATURE FORM FROM PATTON STATE HOSPITAL



INTER-OFFICE MEMO

To: Mr. William Summers, Executive Director
Dr. Sarla Gnanamuthu, Medical Director

Date: June 13, 2000

From: Jane Goerss, Ph.D., Chair
Committee for Research and the Protection of Human Subjects

Telephone: X 7858

Subject: Research Proposal by Sean Carey and Kathie Sylvies, Social Work Interns

Sean Carey and Kathie Sylvies, presently Social Work Interns here at the hospital, submitted the attached proposal to the Research Committee in March of this year. After two meetings and a few revisions, the committee has approved the project to be forwarded to hospital administration and then to John Rodriguez's office (attention Greg Schiller, Ph.D.). We will then be forwarding it to the new Administrator of the Committee for the Protection of Human Subjects in Sacramento, Mr. Alan Zamansky.

We expect that the project will be found exempt from human subjects review at the Sacramento level because no subject identifiers are being gathered or kept. The project is based on the archival data already downloaded for Dr. Raymond Novaco's study of our SIR data, which was already approved. It seems unlikely that this project will raise any new concerns. There is essentially no risk to subjects and no cost to the state.

The committee therefore seeks your approval. Thank you for your consideration.

Action of Medical Director: Approved Disapproved Other

Date 6/15/00
Sarla Gnanamuthu, MD
Sarala Gnanamuthu, MD, Medical Director

Action of Executive Director: Approved Disapproved Other

Date 6-15-00
William Summers
William Summers, Executive Director

APPENDIX B

PROJECT IDENTIFICATION FORM

PATTON STATE HOSPITAL RESEARCH PROJECT IDENTIFICATION NUMBER **266**

**DEPARTMENT OF MENTAL HEALTH
PATTON STATE HOSPITAL
APPLICATION FOR RESEARCH PROJECT**

PRINCIPAL INVESTIGATOR(S) Leslie Sean Carey, MSWI, and
Kathie Sylvies, MSWI

TITLE OF THE PROJECT Gender and Violence Prediction:
A Study of Inpatients at a Forensic Psychiatric Hospital

ESTIMATED DURATION OF THE STUDY 4 months after approval

IS ANOTHER PRIVATE OR PUBLIC FACILITY INVOLVED? Yes _____ No X

If yes, give the full name here.

SOURCES OF FUNDS TO COMPLETE THE PROJECT

Patton (Amount) \$ 0 [Costs to be borne DMH (Amount) \$ 0
by investigators.]

Other Source Name

Other Source Amount

PROTOCOL: Attach a protocol describing project including risks and benefits. Refer to "Guidelines for the Preparation of a Protocol" prepared by the Health and Welfare Agency Committee for the Protection of Human Subjects.

[Proposal attached.]

APPENDIX C

REQUEST FOR REVIEW FROM THE LONG TERM CARE SERVICES OF THE
DEPARTMENT OF MENTAL HEALTH



June 20, 2000

3102 East Highland Avenue, Patton, CA 92369
(909) 425-7000

John Rodriguez, Deputy Director
Long Term Care Services
Department of Mental Health
1600 9th Street
Sacramento, CA 95814

Re: Research Project: Gender and Violence Prediction: A Study of Inpatients at a Forensic
Psychiatric Hospital
Principal Investigators: Leslie Sean Carey, California State University--San Bernardino
Kathie Sylvies, California State University--San Bernardino
Risks involved: Minimal

We are submitting the above-named research project for your approval. It has been approved by our hospital's Committee for the Review of Research and the Protection of Human Subjects (RRPHS), by Sarla Gnanamuthu, MD, Medical Director, and by William Summers, Executive Director.

Because this is a study involving the collection of existing archival data without identifying information, we will be requesting an exemption from review by the Health and Welfare Agency Committee for the Protection of Human Subjects. We are, of course, submitting the proposal to Mr. Alan Zamansky for his determination of exemption status.

Please note that the database involved is the same as that used by Dr. Raymond Novaco in his "Epidemiology of Assaultiveness at Patton State Hospital," approved in 1998.

Enclosed are copies of the proposal, the Patton cover sheet, and our administrative approval. If you have any questions, please feel free to contact me at (909) 425-7858.

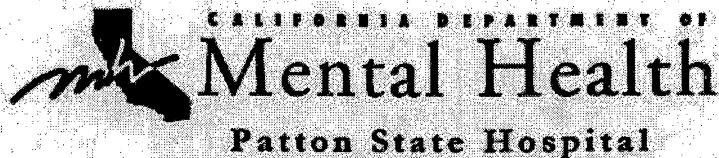
Sincerely,

Jane Goerss, Ph.D., Chairperson
Committee for the Review of Research
and the Protection of Human Subjects

Enclosures

APPENDIX D

REQUEST FOR REVIEW FROM THE COMMITTEE FOR THE PROTECTION
OF HUMAN SERVICES OF THE HEALTH AND HUMAN SERVICES AGENCY



3102 East Highland Avenue, Patton, CA 92369
(909) 425-7000

June 20, 2000

Mr. Alan Zamansky, Administrator
Committee for the Protection of Human Subjects
Office of Statewide Health Planning and Development
1600 Ninth Street, Rm 450
Sacramento, CA 95814

Re: Research Project: Gender and Violence Prediction: A Study of Inpatients at a Forensic
Psychiatric Hospital
Principal Investigators: Leslie Sean Carey, California State University--San Bernardino
Kathie Sylvies, California State University--San Bernardino
Risks involved: Minimal

The above research project was approved by our hospital's Committee for the Review of Research and the Protection of Human Subjects (RRPHS), by Sarla Gnanamuthu, MD, Medical Director, and by William Summers, Executive Director.

Because this is a study based solely on review of existing documentation, without the collection by the investigators of identifying information, the investigators are requesting exemption from full review per 45 CTR 46.101(b)(4). We concur with this request; however, we will of course defer to the Agency Committee for the Protection of Human Subjects on this issue. Please note that this study uses the same database as in the previously approved project "Epidemiology of Assaultiveness at Patton State Hospital," determined to be exempt from Committee Review as affirmed in a letter from Mr. John White dated June 2, 1998, a copy of which is attached.

Enclosed are copies of the proposal, the Patton cover sheet, and our administrative approval. I look forward to hearing from you. Thank you for your consideration.

Sincerely,

Jane Goerss, Ph.D., Chairperson
Committee for the Review of Research
and the Protection of Human Subjects

Enclosures

APPENDIX E

APPROVAL FROM THE LONG TERM CARE SERVICES

State of California
Department of Mental Health

Memorandum

To : William Summers
Executive Director
Patton State Hospital

Date: July 5, 2000

From : Long Term Care Services

Telephone: (916) 654-2413

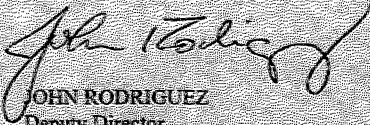
Subject : PATTON RESEARCH PROJECT 266

Title: "Gender and Violence Prediction: A Study of Inpatients at Patton Psychiatric Hospital"

Principal Investigators: Leslie Sean Carey, MSW Intern
Kathie Sylvies, MSW Intern

Risk Involved: Minimal.

The above research project has been reviewed by the appropriate in-house staff and is approved for submission to the Health and Welfare Agency Committee for the Protection of Human Subjects. This committee grants the exemption from Human Subjects review.


JOHN RODRIGUEZ
Deputy Director

cc: Jane Goerss, Ph.D.
Leslie Sean Carey, MSWI
Kathie Sylvies, MSWI
Greg Schiller, Ph.D.

APPENDIX F

APPROVAL FROM THE COMMITTEE FOR THE PROTECTION OF HUMAN
SUBJECTS

STATE OF CALIFORNIA—HEALTH AND HUMAN SERVICES AGENCY

GRAY DAVIS, Governor

COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS

1600 9th Street, Room 450
Sacramento, California 95814
(916) 653-0176 FAX (916) 654-3200



September 21, 2000

Jane Goerss, Ph.D., Chairperson
Committee for the Review of Research and the Protection of Human Subjects
Patton State Hospital
3102 East Highland Ave.
Patton, CA 92369

Dear Dr. Goerss:

RE: Project Entitled: "Gender and Violence Prediction: A Study of Inpatients at a Forensic Psychiatric Hospital"

Your protocol for the above-named project has been reviewed. The project has been found to be exempt from review by the Committee for the Protection of Human Subjects, since it is a collection or study of existing data, and the information is recorded so that subjects cannot be identified directly or through links. It therefore meets the requirements for exemption in 45 CFR 46.101 (b) (4).

If the parameters of your project change, or are reasonably expected to change, so that the project might no longer meet the requirements for exemption of 45 CFR 46.101 (b) (4), you will need to submit a protocol of your project to the Committee for approval. The protocol must include the changes occurring or expected to occur in your project. Information is available from this office to assist you in assessing whether your project might no longer meet these exemption requirements.

If you have any questions, please contact me at (916) 653-0176.

Sincerely,

A handwritten signature in black ink, appearing to read "Alan Zamansky".

ALAN ZAMANSKY, Administrator
Committee for the Protection of Human Subjects

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